LArSoft - Bug #19216

larsoft-v06_70_00 unable to run larsoft event display

03/03/2018 10:33 AM - Tracy Usher

Status:	Resolved		**Start date:**	03/03/2018
Priority:	Urgent		**Due date:**	
Assignee:			**% Done:**	100%
Category:			**Estimated time:**	0.00 hour
Target version:			**Spent time:**	0.00 hour
Occurs In:	develop/HEAD		**Co-Assignees:**	
Experiment:	ICARUS			

Description

I just completed the build of larsoft v06_70_00 on OS X (Sierra). This was a local build, not download of prebuilt binaries. When I try to run lar with the event display enabled it crashes with the following string of messages:

In file included from libEventDisplayBase dictionary payload:14:
In file included from /LBNE/Products/LarSoft/nutools/v2_19_00/include/nutools/EventDisplayBase/ServiceTable.h:9:
In file included from /LBNE/Products/LarSoft/fhiclcpp/v4_06_05/include/fhiclcpp/ParameterSet.h:10:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/any.hpp:20:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index.hpp:29:
In file included from
/LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index/stl_type_index.hpp:34:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/core/demangle.hpp:32:
/usr/include/cxxabi.h:79:13: error: conflicting types for '__cxa_guard_acquire'
extern int _cxa_guard_acquire(uint64_t*);
            ^
/LBNE/Products/LarSoft/gcc/v6_4_0/Darwin64bit+16/lib/gcc/x86_64-apple-darwin16.7.0/6.4.0/../../../../include/c++/6.4.0/cxxabi.h:121:
3: note:
previous declaration is here
__cxa_guard_acquire(_guard*);
            ^
In file included from libEventDisplayBase dictionary payload:14:
In file included from /LBNE/Products/LarSoft/nutools/v2_19_00/include/nutools/EventDisplayBase/ServiceTable.h:9:
In file included from /LBNE/Products/LarSoft/fhiclcpp/v4_06_05/include/fhiclcpp/ParameterSet.h:10:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/any.hpp:20:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index.hpp:29:
In file included from
/LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index/stl_type_index.hpp:34:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/core/demangle.hpp:32:
/usr/include/cxxabi.h:80:13: error: conflicting types for '__cxa_guard_release'
extern void _cxa_guard_release(uint64_t*);
            ^
/LBNE/Products/LarSoft/gcc/v6_4_0/Darwin64bit+16/lib/gcc/x86_64-apple-darwin16.7.0/6.4.0/../../../../include/c++/6.4.0/cxxabi.h:124:
3: note:
previous declaration is here
__cxa_guard_release(_guard*) GLIBCXX_NOTHROW;
            ^
In file included from libEventDisplayBase dictionary payload:14:
In file included from /LBNE/Products/LarSoft/nutools/v2_19_00/include/nutools/EventDisplayBase/ServiceTable.h:9:
In file included from /LBNE/Products/LarSoft/fhiclcpp/v4_06_05/include/fhiclcpp/ParameterSet.h:10:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/any.hpp:20:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index.hpp:29:
In file included from
/LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/type_index/stl_type_index.hpp:34:
In file included from /LBNE/Products/LarSoft/boost/v1_66_0/Darwin64bit+16-e15-debug/include/boost/core/demangle.hpp:32:
/usr/include/cxxabi.h:81:13: error: conflicting types for '_cxa_guard_abort'
extern void _cxa_guard_abort(uint64_t*);
            ^
/LBNE/Products/LarSoft/gcc/v6_4_0/Darwin64bit+16/lib/gcc/x86_64-apple-darwin16.7.0/6.4.0/../../../../include/c++/6.4.0/cxxabi.h:127:
3: note:
previous declaration is here

```
__cxa_guard_abort(_guard*) _GLIBCXX_NOTHROW;
^
```

I did try to download the binaries (d16 e15 debug) for both boost and nutools but this does not fix the crash.

History

#1 - 03/03/2018 10:37 AM - Tracy Usher

Note that larsoft v06_70_00 did not appear to be an option in the "Occurs In" drop down list.

#2 - 03/12/2018 10:28 AM - Lynn Garren

- Status changed from New to Feedback

Does the event display work on Linux?
Does the event display work with a prof build?
Would you please supply us with a user input file and a fcl configuration so that we can test.

The problem appears to be a conflict between boost and the system headers. It may need the c2 build, which we are pursuing.

#3 - 04/16/2018 10:22 AM - Lynn Garren

Is the problem now resolved with the c2 build of larsoft?

#4 - 04/16/2018 10:39 AM - Tracy Usher

Lynn Garren wrote:

> Is the problem now resolved with the c2 build of larsoft?

Hi Lynn,
I have been able to run with the event display on osx with larsoft v06_74_00 (using c2 builds).
It is my understanding that there is still not a uboonecode c2 build so Bruce may not be running just yet... but that is a different topic.

```
Tracy
```

#5 - 04/16/2018 11:12 AM - Lynn Garren

- Status changed from Feedback to Resolved

- % Done changed from 0 to 100

Resolved with the c2 build of larsoft.

The uboonecode c2 build is a different and more complicated problem.